

CLAIMS

I claim :

1. A wireless networking device operating within a network protocol in which a reservation is made for transmission of data to one or more other wireless network devices, the wireless networking device comprising:

a dynamic reservation determination module, the module supplying a reservation parameter associated with a reservation of a certain length, the transmission of data corresponding to multiple separate transmissions within the certain length, the dynamic reservation module selectively changing the reservation parameter based on the results of prior transmissions.

2. The device of claim 1, wherein the dynamic reservation determination module determines if a last transmission reservation was oversufficient, and if the last transmission was oversufficient, decreases the reservation.

3. The device of claim 2 wherein the dynamic reservation determination module decreases the reservation by a predefined amount.

4. The device of claim 3 wherein the dynamic reservation determination module decreases the reservation by a predefined amount of time

5. The device of claim 3 wherein the dynamic reservation determination module decreases the reservation by an amount associated with a predefined amount of data.
6. The device of claim 2 wherein the dynamic reservation determination module decreases the reservation by a computed amount.
7. The device of claim 6 wherein the computed amount is obtained through filtering.
8. The device of claim 1 wherein the first reservation is based on a predefined default value.
9. The device of claim 1 wherein the first reservation is based on a value determined by prior operation.
10. The device of claim 1, wherein the dynamic reservation determination module determines if a last transmission reservation was insufficient, and if the last transmission reservation was insufficient, increases the reservation.
11. The device of claim 10 wherein the dynamic reservation determination module increases the reservation by a predefined amount.
12. The device of claim 11 wherein the dynamic reservation determination module increases the reservation time by a predefined amount.

13. The device of claim 11 wherein the dynamic reservation determination module increases the reservation time by a time associated with a predefined amount of data.

14. The device of claim 10 wherein the dynamic reservation determination module increases the reservation by a computed amount.

15. The device of claim 14 wherein the computed amount is obtained through filtering.

16. A wireless networking device operating within a network protocol in which a reservation is made for transmission of data with a dynamically updateable reservation parameter, the wireless networking device comprising:

a utilization module, the utilization module determining the efficiency characteristics of the reservation -, and initiating a signal to alter the reservation parameter.

17. A wireless networking device operating within a network protocol in which a reservation is made for transmission of data, the wireless networking device comprising:

a utilization module, the utilization module determining the efficiency characteristics of a the reservation, and initiating a signal associated with the determined efficiency; and

a dynamic reservation determination module, communicatively coupled to the utilization module, that supplies a reservation parameter for making a reservation of a

certain length, the dynamic reservation module operable to alter the reservation parameter in response to the signal generated by the utilization module.

18. The wireless networking device of claim 17 wherein the full transmission of data is made with multiple transmissions of packets.

19. A method of altering the operating characteristics of a wireless network connection associated with a wireless network device, the wireless network device operable to transmit data to another wireless network device under a network protocol that has a reservation, the reservation associated with a reservation parameter, the method comprising:

monitoring the transmission;

determining the utilization of the transmission;

selectively, based on the step of determining, altering the reservation parameter;

and

wherein the full transmission of data occurs with multiple transmissions of packets

19. A method for operating a wireless networking device that communicates data under a network protocol, the network protocol including a reservation for a transmission of data to one or more other wireless network devices, the method comprising:

supplying a reservation parameter associated with a particular reservation amount;

and

selectively changing the reservation parameter based on the results of prior transmissions.

20. The method of claim 19, further comprising:
determining if a last transmission reservation was oversufficient; and
the step of selectively changing comprising:
selectively, if the last transmission was oversufficient, decreasing the reservation.
21. The method of claim 20, the step of selectively decreasing comprising:
decreasing the reservation by a predefined amount.
22. The method of claim 21 wherein the predefined amount is a predefined amount of time
23. The method of claim 21 wherein the predefined amount is associated with a predefined amount of data based on operating characteristics of the networking device.
24. The method of claim 20, the step of selectively decreasing comprising:
decreasing the reservation by a computed amount.
25. The method of claim 24 wherein the computed amount is obtained through filtering.

26. The method of claim 19 further comprising
prior to the first transmission, supplying a first reservation based on a predefined default value.
27. The method of claim 19 further comprising
prior to the first transmission, supplying a first reservation a value based on prior operation.
28. The method of claim 19, further comprising:
determining if a last transmission reservation was insufficient; and
the step of selectively changing comprising:
selectively, if the last transmission was insufficient, increasing the reservation.
29. The method of claim 28, the step of selectively increasing comprising:
increasing the reservation by a predefined amount.
30. The method of claim 29 wherein the predefined amount is a predefined amount of time
31. The method of claim 29 wherein the predefined amount is associated with a predefined amount of data based on operating characteristics of the networking device.

32. The method of claim 28, the step of selectively increasing comprising:
increasing the reservation by a computed amount.
33. The method of claim 24 wherein the computed amount is obtained through filtering.
34. A wireless networking device operating within a network protocol in which a reservation is made for transmission of data, the wireless networking device comprising:
utilization monitoring means, the utilization monitoring means determining the efficiency characteristics of a transmission, and initiating a signal associated with the determined efficiency; and
means for selectively determining a reservation, communicatively coupled to the utilization monitoring means, that supplies a reservation parameter for making a reservation of a certain length, the means for selectively determining a reservation operable to alter the reservation parameter in response to the signal generated by the utilization monitoring means.
35. The device of claim 34, wherein:
the utilization monitoring means comprising:
a means for determining if a last transmission reservation was oversufficient; and
the means for selectively determining a reservation comprising:

means for decreasing the reservation based upon if the last transmission was oversufficient

36. The device of claim 35, wherein the means for decreasing is operable to decrease the reservation by a predefined amount.

37. The device of claim 36 wherein the predefined amount is a predefined amount of time

38. The device of claim 36 wherein the predefined amount is associated with a predefined amount of data based on operating characteristics of the networking device.

39. The device of claim 35, the means for decreasing comprising:
means for decreasing the reservation by a computed amount.

40. The device of claim 39 wherein the computed amount is obtained through filtering.

41. The device of claim 34 further comprising
means for supplying a first reservation, prior to the first transmission, the first reservation based on a predefined default value.

42. The device of claim 34 further comprising

means for supplying a first reservation, prior to the first transmission, the first reservation based on a value determined by previous operation of the device.

43. The device of claim 34, wherein:

the utilization monitoring means comprising:

a means for determining if a last transmission reservation was insufficient;

and

the means for selectively determining a reservation comprising:

means for increasing the reservation based upon if the last transmission was insufficient

44. The device of claim 43, wherein the means for increasing is operable to increase the reservation by a predefined amount.

45. The device of claim 44 wherein the predefined amount is a predefined amount of time

46. The device of claim 44 wherein the predefined amount is associated with a predefined amount of data based on operating characteristics of the networking device.

47. The device of claim 43, the means for increasing comprising:
means for increasing the reservation by a computed amount.

48. The device of claim 47 wherein the computed amount is obtained through filtering.

49. A wireless networking device operating within a network protocol in which a reservation is made for transmission of data, the wireless networking device communicating to two or more other wireless networking devices, the wireless networking device comprising:

a utilization module, the utilization module determining the efficiency characteristics of a transmission, and initiating a signal associated with the determined efficiency;

a dynamic reservation determination module, communicatively coupled to the utilization module, that supplies a reservation parameter for making a reservation of a certain length, the dynamic reservation module operable to alter the reservation parameter in response to the signal generated by the utilization module;

the wireless networking device using and selectively altering a first dynamic reservation parameter when communicating with a first other wireless networking device; and

the wireless networking device using and selectively altering a second dynamic reservation parameter when communicating with a second other wireless networking device.

50. A wireless networking device operating with a network protocol in which a reservation is made for transmission of data to one or more other wireless network devices, the wireless networking device comprising:

a reservation determination module, the module supplying a reservation parameter associated with a reservation of a certain length; and

the reservation parameter associated with the transmission of data in multiple packets within the associated reservation.

51. A wireless networking device operating with a network protocol in which a reservation is made for transmission of a dataset to one or more other wireless network devices, the wireless networking device comprising:

a transmitter that transmits the dataset to the one or more other wireless network devices, the transmitted dataset being transmitted in multiple groupings of data;

a data queue, communicatively coupled to the transmitter, that holds the data to be transmitted;

a reservation determination module, the module supplying a reservation parameter associated with a reservation of a length, the length associated with an estimated length to transmit the entire multiple groupings of data;

wherein the reservation parameter is operable to supply the reservation parameter prior to all data in the dataset being present in the data queue.

52. A wireless networking device operating with a network protocol in which a reservation is made for transmission of a dataset to one or more other wireless network devices, the wireless networking device comprising:

a transmitter that transmits the dataset to the one or more other wireless network devices, the transmitted dataset being transmitted in multiple groupings of data;

a data queue, communicatively coupled to the transmitter, that holds the data to be transmitted;

a reservation determination module, the module supplying a reservation parameter associated with a reservation of a length, the length associated with an estimated length to transmit the entire multiple groupings of data;

wherein the reservation parameter corresponds to a dataset size larger than can be store at one time in the data queue.